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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,507	10/26/2001	Nicholas F. Borrelli	CGW-263.1	8920

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EXAMINER
HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
1731	

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/039,507	BORRELLI ET AL.	
	Examiner	Art Unit	
	John Hoffmann	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-4 and 6-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-4 and 6-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 2-4, 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schermerhorn et al. 4789389 in view of Komine et al. 5707908.

Schermerhorn et al. teach all that is in claims 2-4, 6-11 (see claims 1, 2 and 4), except: 1) that a stepper lens is produced from the sintered body, 2) exposing the stepper lens to high intensity excimer radiation and determining the compaction of the sample; and 3) using the stepper lens to perform photolithography.

However, Komine teaches that it is well known that excimer lasers are used in lithography methods and that these excimer lasers produce UV light of 400 nm or less (col. 1, lines 9-12, 15-26). Komine also teaches that exposure to the excimer laser light causes deterioration (compaction) of the lens material and subsequently effects the refractive indices and other optical properties of the lens (col. 1, lines 27-40, 65-67, col. 2, lines 1-15). Thus, it is well known to use a stepper lens in photolithography having desirable UV transmitting properties and to check the lens for compaction problems caused by the laser exposure.

Moreover, Schermerhorn et al. teach that their sol-gel produced glass material is used for making optical quality glasses (i.e. lenses) having good UV transmitting properties (col. 13-14, "Example 2", col. 14, lines 55-68).

It would have been prima facie obvious at the time the invention was made to combine Komine et al.'s teachings with Schermerhorn et al.'s method of making optical quality glasses because optical quality glasses obviously includes making lenses from the glass and the desirable UV transmitting properties taught by Schermerhorn et al. are also taught by Komine et al. Thus, using the glass to make a stepper lens for use in photolithography and measuring its degree of compaction during use would have been obvious.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 2-4, 6-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4 of U.S. Patent No. 4789389 in view of Komine et al. 5707908.

Schermerhorn et al. teaches all that is in the claims, including using the sol-gel produced, UV wavelength transmitting glass for optical applications. Komine teaches that a stepper lens for photolithography, having good UV wavelength transmittance and thus good resistance to

compaction, is a known optical application. Thus it would have been obvious to use the method to produce a stepper lens for photolithography while checking the lens for compaction that would adversely effect its light transmitting properties.

Response to Arguments

Applicant's arguments filed 17 July 2003 have been fully considered but they are not persuasive.

In response to applicant's argument that the prior art does not disclose the improvement in compaction, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

IT is further argued that Schermerhorn would lead people away from using the glass in UV applications. Applicant's rely on the Schermerhorn's transmission data. This is not persuasive because col. 15, lines 28-39 state that the glasses are "functionally equivalent" to premium glass. It also gives other reasons why the glass is better: purity and ability to directly cast without having to machine bulk glass or press from sheets.

It is further argued that Schermerhorn does not disclose the "unexpected result". The burden is on Applicant to demonstrate results are truly unexpected. See *In re*

Klosak, 455 F.2d 1077, 1080, 173 USPQ 14, 16 (CCPA 1972) There is no requirement that the Office needs to show that results are expected.

It is well established that the evidence relied on to establish unobviousness must be commensurate in scope with the claimed subject matter. See *In re Kerkhoven*, 626 F.2d 846, 851, 205 USPQ 1069, 1072-1073 (CCPA 1980) and *IN re Clemens*, 622 F. 2d 1029, 1035, 206 USPQ 289, 296 (CCPA). Presently, Applicant has not met the burden of explaining how the results reported in the specification can be extrapolated from the limited instances presented so as to be guaranteed as attainable through practicing the invention as broadly claimed. MOREOVER, Applicant have not met the burden of establishing that the reported compaction property would have been truly expected to a person of ordinary skill in the art. Examiner could not even find any details as to how the glass (with purported unexpected results) was produced - or how the results were determined for each glass. For example, perhaps the alleged new results were simply a by-product of isostatic pressing (claim 7) - and perhaps one of ordinary skill would expect such to give better results for any glass. Perhaps better results come from a better starting composition, sintering temperature or atmosphere composition.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

9-03-03

John Hoffmann
Primary Examiner
Art Unit 1731

jmh